DRAFT

MEPA/NEPA/HB495 GENERIC CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action Lake Rehabilitation Using Rotenone

2. Agency Authority for the Proposed Action MAC 87-3-206 (use of poison to control undesirable fish) A87-1-201, MCA et seq and 87-3-206, MCA.

3. Name of Project Little McGregor Lake Rehabilitation

4. Name, Address and Phone Number of Project Sponsor (if other than the agency) Fisheries Biologist Ladd Knotek (406) 751-4542
Montana Fish, Wildlife & Parks (FWP)
490 N. Meridian Rd.
Kalispell, MT 59901

5. If Applicable:

Estimated Construction/Commencement Date October 1998
Estimated Completion Date December 1999
Current Status of Project Design (% complete) N/A

*NOTE: Timing of this project contingent on water level and feasibility of a higher priority project. If the rehabilitation is not completed in 1998, it will occur during the same period in 1999.

6. Location Affected by Proposed Action (county, range and township)

Flathead County; T26N; R25W; Section 14

7. Project Size: Estimate the number of acres that would be directly affected that are currently:

(a) Developed:
residential . . . 0 acres
industrial . . . . 0 acres

(b) Open Space/Woodlands/
Recreation . . . 0 acres

(c) Wetlands/Riparian
Areas . . . . . 0 acres

(d) Floodplain . . . . . 0 acres

(e) Productive:
irrigated cropland . . . 0 acres
dry cropland . . . . . 0 acres
forestry . . . . . 0 acres
rangeland . . . . . 0 acres
other . . . . . 38 acres
-Lake (aquatic)

8. Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

Map attached.

9. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.

The lake will be treated with rotenone at a concentration of ~2ppm to remove illegally introduced yellow perch (*Perca flavescens*) and largemoutn bass (*Micropeterus salmoides*). The lake will be treated in fall just prior to ice-up and rotenone will detoxify prior to thaw the next spring. We will postpone hatchery plants and lift fishing regulations prior to poisoning. Treatment will allow reestablishment of a productive salmonid fishery. Presently, the lake contains yellow perch, largemouth bass, a few brook trout (35 - 136mm), and a limited number of rainbow trout (190 - 240mm). After rehabilitation, the lake will be stocked and managed as a trout fishery.

10. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

Agency Name	Permit	Date Filed/#
Montana Dept. of Environ. Quality	Discharge Permit for Rotenone	Pending
Montana Dept. of Agriculture	Applicator License Rotenone	1997/1-07-14689-15

(b) Funding:

Agency Name	Funding Amount
Bonneville Power Administration/FWP	$25,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
Fish, Wildlife & Parks	Manages and owns lands surrounding the lake

11. List of Agencies Consulted During Preparation of the EA:
Dept. of Natural Resources & Conservation
Montana Dept. of Environmental Quality

PART II. ENVIRONMENTAL REVIEW

A. Evaluation of the Impacts of the Proposed Action Including Secondary and Cumulative Impacts on the Physical and Human Environment:

PHYSICAL ENVIRONMENT

1. LAND RESOURCES **Will the proposed action result in:**	IMPACTS				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Soil instability or changes in geologic substructure?		x				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		x				
c. Destruction, covering or modification of any unique geologic or physical features?		x				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		x				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT

2. AIR **Will the proposed action result in:**	IMPACTS				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Emission of air pollutants or deterioration of ambient air quality?		x				
b. Creation of objectionable odors?			x		Yes	2b.
c. Alteration of air movement, moisture or temperature patterns, or any change in climate, either locally or regionally?		x				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		x				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

2b. Petroleum carrier for Rotenone has an objectionable odor, but impacts are minimal and short term due to the dilution of the compound, short active life, and timing of application (just prior to ice formation). Objectionable odors may also result from fish decomposition, but application will occur in cold water temperatures (slowing decomposition), human use of the lake is minimal in fall and predators will consume many of the dead fish.

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

PHYSICAL ENVIRONMENT (continued)

3. WATER Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, turbidity or pathogens?			x		Yes	3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?		x				
c. Alteration of the course or magnitude of flood water or other flows?		x				
d. Changes in the amount of surface water in any water body or creation of a new water body?		x				
e. Exposure of people or property to water related hazards such as flooding?		x				
f. Changes in the quality of groundwater?		x				
g. Changes in the quantity of groundwater?		x				
h. Increase in the risk of contamination of surface or groundwater?		x				
i. Violation of the Montana Non Degradation Statute?		x				
j. Effects on any existing water right or reservation?		x				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?		x				
l. Effects on other users as a result of any alteration in surface or groundwater quantity?		x				
m. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

3a. Rotenone and Carrier will be distributed throughout the lake and is lethal to gill-breathing organisms. Rotenone is a naturally occurring organic compound that interferes with oxygen transfer across gills. At the levels used, fish will be killed and aquatic invertebrates will be reduced, but not eliminated. Birds, mammals, reptiles, and other species lacking gills are not harmed by the chemical. Rotenone detoxifies naturally over time. There is no perennial outflow or inflow to Little McGregor Lake.

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

PHYSICAL ENVIRONMENT (continued)

4. VEGETATION Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		x				
b. Alteration of a plant community?		x				
c. Adverse effects on any unique, rare, threatened, or endangered plant species?		x				
d. Reduction in acreage or productivity of any agricultural land?		x				
e. Establishment or spread of noxious weeds?		x				
f. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT

5. FISH/WILDLIFE Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Deterioration of critical fish or wildlife habitat?		x				
b. Changes in the diversity or abundance of game animals or bird species?			x		Yes	5b.
c. Changes in the diversity or abundance of nongame species?			x		Yes	5c.
d. Introduction of new species into an area?		x				
e. Creation of a barrier to the migration or movement of animals?		x				
f. Adverse effects on any unique, rare, threatened, or endangered species?		x				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		x				
h. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

5b & c. Rotenone will be lethal to yellow perch, largemouth bass, and any remaining rainbow trout. The lake will be restocked with trout the spring following treatment to reestablish a fishery. Introduced nongame species will be eliminated to improve conditions for game species. The abundance and growth rates of game species is expected in increase after rehabilitation. Pisciverous birds and mammals may be affected temporarily by removal of fish. Most migratory birds have left by late October and will be unaffected, but will have less prey the following spring prior to restocking. Invertebrates will be temporarily reduced in number. Effects on amphibians will be monitored before and after treatment, but should be minimized by late fall treatment.

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Increases in existing noise levels?		x				
b. Exposure of people to serve or nuisance noise levels?		x				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		x				
d. Interference with radio or television reception and operation?		x				
e. Other: __		x				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

7. LAND USE Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		x				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		x				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		x				
d. Adverse effects on or relocation of residences?		x				
e. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			x			8a.
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		x				
c. Creation of any human health hazard or potential hazard?		x				
d. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

8a. Rotenone is applied with a petroleum carrier. Both substances are environmentally safe, degrade quickly, and are approved for use by U. S. Fish & Wildlife Service (USF&WS) and the Food and Drug Administration (FDA). When properly applied, Rotenone is not harmful to humans.

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

HUMAN ENVIRONMENT

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other: ___						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Have an effect upon the local or state tax base and revenues?		X				
c. Result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Result in increased used of any energy source?		X				
e. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

HUMAN ENVIRONMENT

11. AESTHETICS/RECREATION Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			x		Yes	11a.
b. Alteration of the aesthetic character of a community or neighborhood?		x				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)			x		Yes	11c.
d. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11a & c. Rehabilitation will cause a large fish kill; aesthetics and odor may be temporarily displeasing. We will collect fish that was ashore. The rehabilitation will be conducted in late fall when recreational use is minimal. Poisoning of the lake will result in short-term (off season) loss of fishing opportunity for the purpose of long-term benefits to angling opportunity.

HUMAN ENVIRONMENT (continued)

12. CULTURAL/HISTORICAL RESOURCES Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?		x				
b. Physical change that would affect unique cultural or historic values?		x				
c. Effects on existing religious or sacred uses of a site or area?		x				
d. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed):

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE **Will the proposed action, considered as a whole:**	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)		x				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		x				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		x				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		x				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		x				
f. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed):

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

PART II. ENVIRONMENTAL REVIEW (Continued)

Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

a. No Action: Continue managing lake in current state where fishery is extremely limited and survival of stocked salmonids is low. Stunted perch do not provide an adequate fishery.
b. Rehabilitate the lake to reestablish a productive sport fishery for trout.
c. Rehabilitate the lake at a later date.
d. Biological Control: Introduce pisciverous predator to help reduce abundant prey populations.

Alternative b. is the most acceptable alternative based on the current state of the fishery and recovery potential using other alternatives. No Action would result in maintenance of the current low quality fishery. Biological control would require introduction of a new species. This is not presently acceptable and has been carried out with limited success in similar waters.

Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

Currently Little McGregor Lake has fishing regulations that include daily limits of 5 trout. We plan to temporarily lift bag limits to allow as many fish to be captured as possible prior to treatment.

4. Based on the significance criteria evaluated in this EA, is an EIS required? **NO** If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

Adverse impacts are short-term and can be mitigated.

5. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

Public involvement will include notice in the local newspaper, FWP News Release, State Bulletin Board, and distribution of the DRAFT EA to those involved and interested parties for a 14 day comment period. Rehabilitation was proposed as an option for Little McGregor Lake in the Thompson Chain of Lakes Fishery Management Plan. Sixty-two people commented on management of Little McGregor. Most people that commented considered chemical rehabilitation an option.

6. Duration of comment period if any:

14 day comment period.

7. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:

Fisheries Biologist Ladd Knotek
Montana Fish, Wildlife & Parks
490 N. Meridian Road
Kalispell, MT 59901
(406) 751-4542

PART III. NARRATIVE EVALUATION AND COMMENT

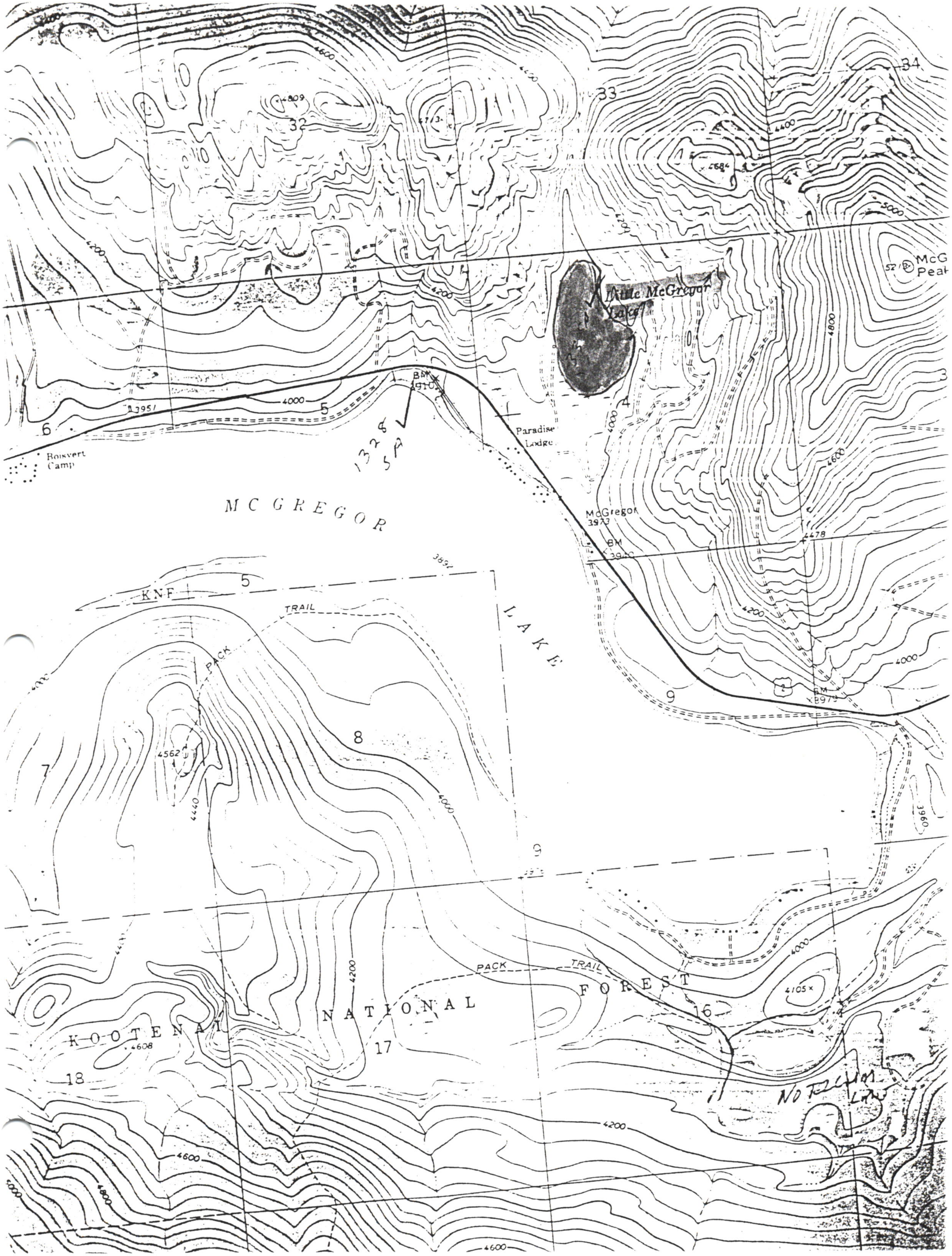
Little McGregor Lake is a closed basin lake that lies entirely within Montana State Lands ownership. The lake has potential to be a productive trout fishery, but is presently limited by illegally introduced yellow perch. Rehabilitation should eliminate this limiting factor. Little McGregor Lake has traditionally been managed with planted brook, rainbow, and westslope cutthroat trout and has received 1,200 days or more of fishing annually.

Possible adverse effects of a rehabilitation project are short-term and can be mitigated. Late fall treatment with rotenone and restocking the following spring minimize many of the concerns associated with rehabilitation.

PART IV. EA CONCLUSION SECTION

After considering potential impacts and alternatives to the proposed action, FWP recommends treatment of Little McGregor Lake with rotenone to restore a productive salmonid sport fishery.

REF:McGrgdea.wpd
June 18, 1998



Little McGregor Lake
Paradise Lodge
Boisvert Camp
McGregor 3973
M C G R E G O R
L A K E
K N F
PACK TRAIL
PACK TRAIL
K O O T E N A I
N A T I O N A L
F O R E S T
1328 SP